

**Name: PRATYUSHA CHOWDARI CH**

Designation: Assistant Professor

Department: Electronics & Communication Engineering

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Experience (in years): 11yrs

Teaching: 11yrs

Research: 8yrs

### 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph. D	Pursuing	Low PowerVLSI
2	M.Tech	2011	VLSI Design
3	B. Tech	2009	Electronics & Communication Engineering

### 2. Teaching and Learning:

#### 2.1 Teaching Interests:

Electronic Circuit Analysis, Digital Logic Design, Microprocessor and Microcontrollers, Switching Theory and Logic Design, Signals and Systems, Analog Pulse Circuits, CMOS Analog and Mixed Signal Design and Programming Data Structures using Python.

2.2 Teaching & Learning Techniques adopted: Videos, PPT, Quizzes, Think Pair Share, Group Discussion, etc.,

2.3 Involvement in curriculum updating / Design: Involved in curriculum update in Digital Electronics subject and corresponding Lab syllabus.

### 3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Interest in Teaching and Research, Reading books, Meditation, Yoga.

#### 3.2. CCA/ECA Organized:

1. Organized Inter College Sports Meet-KHELOTSAV-2020 at GRIET on 07-01-2020.
2. Organized 48 hour Hackathon titled ACI Challenge ACI-2019 at GRIET from 11-10-2019 to 13-11-2019.
3. Organized 48 hour Hackathon titled ACI Challenge ACI-2018 at GRIET from 12-10-2018 to 14-11-2018.

3.3.CCA/ECA participated: NA

3.4. Counselling and Mentoring Activity: NA

3.5. Committees involved in:

Department level: Time Table coordinator.

Institute Level: NA

#### **4. Conference / Workshop / Seminar / Guest Lectures:**

##### 4.1 Conducted:

1. Organized a Case Study - based Workshop on IOT and Machine Learning at GRIET, Hyderabad from 1<sup>st</sup> to 3<sup>rd</sup> February 2018.
2. Organized a two-day faculty development program on “MATLAB to HDL” at GRIET, Hyderabad on 24<sup>th</sup> & 25<sup>th</sup> March 2017.
3. Organized “Microcontrollers workshop using Arduino, Tiva-C & MSP430” at GRIET, Hyderabad, from 2<sup>nd</sup> to 4<sup>th</sup> May 2017.
4. Organized a two-day Workshop on- TivaC, Orbit Booster Pack and Energia at GRIET, Hyderabad, 15-12-2016 and 16-12-2016.
5. Organized a three-day workshop on- Smart homes measurements grids using IOT at GRIET, Hyderabad, from 17<sup>th</sup> to 19<sup>th</sup> October 2016.
6. Organized a two-day Hands-on FDP on- Software Defined Radio at GRIET, Hyderabad, on 16-12-2015 and 17-12-2015.
7. Organized a three-day faculty development program on Estimation Theory for Signal Processing and Cognitive Radio Networks at GRIET, Hyderabad, from 15-10-2015 to 17-10-2015.

##### 4.2. Attended:

1. A workshop on “Analog VLSI Design” at Muffakham Jah College of Engineering and Technology during 2<sup>nd</sup> to 7<sup>th</sup> December 2019.
2. AICTE approved FDP101X on Foundation Program in ICT for Education and FDP201X on Pedagogy for Online and Blended Teaching-Learning Process organized by IIT BOMBAY at GRIET, Hyderabad during 3<sup>rd</sup> to 30<sup>th</sup> May 2018 (one month) and 8<sup>th</sup> March to 12<sup>th</sup> April 2018 (one month).
3. AICTE Sponsored Short term course - HDL for Signal, Image and Video Processing (HSIVP) at IIT (BHU), Varanasi from 21<sup>st</sup> to 26<sup>th</sup> August 2017.
4. A ten day workshop on “DSP and Applications” at GITAM, Visakhapatnam, 9<sup>th</sup> to 18<sup>th</sup> Nov 2016.
5. FDP on Latest Technology and Trends (4G, IOT, Dockers, SDN, Network Management) at TCS, Hyderabad on 23<sup>rd</sup> & 24<sup>th</sup> August 2016.

6. ET601Tx: Educational Technology for Engineering Teachers a course of study offered by IITBombayX, an online learning initiative of Indian Institute of Technology Bombay (07 January - 07 March 2016).
7. Participated as a mentor in the Remote Internship Program by TCS, Hyderabad at GRIET from 29<sup>th</sup> December 2015 to 25<sup>th</sup> April 2016 (4 months).
8. Participated in an International Conference on Micro-Electronics, Electromagnetics and telecommunications GITAM, Visakhapatnam on 2015-12-18 and 2015-12-19.
9. WHS791x: Technical Communication for Scientists and Engineers a course of study offered by IITBombayX, an online learning initiative of Indian Institute of Technology Bombay (8 October - 18 November 2015).
10. A five day Continuing Education and Training Program-Low Power System on Chip using Xilinx FPGA Devices at NIT, Warangal during 3<sup>rd</sup> to 7<sup>th</sup> October 2015.
11. Latest Technology and Trends by TCS, Hyderabad at GRIET 2015-08-20 and 2015-08-21.
12. One week FDP organized by Department of Career Guiding and Counselling at GRIET from 29<sup>th</sup> June to 4<sup>th</sup> July 2015.
13. Two weeks ISTE workshop on Control Systems, by IIT Kharagpur from 2<sup>nd</sup> to 12<sup>th</sup> December 2014.

## 5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: NA

5.2. Articles/ Chapters published in Books:

1. Performance Evaluation of Stochastic Gammatone Filters, Lecture Notes in Electrical Engineering book series (LNEE, volume 601).
2. Design of Adaptive Filter Using Vedic Multiplier for Low Power, Advances in Intelligent Systems and Computing book series (AISC, volume 434)

5.3. Books published as single author or as editor: NA

5.4. Projects Guided :

a) UG :12 b) PG :2

5.5. Research Interests : Low Power VLSI, VLSI-Signal Processing, Communications.

5.6. Ph.D Students :

a) Enrolled : -                      b) Submitted : -                      c) Awarded : -

5.7. Papers published in reviewed journals :

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/I SSN	Impact Factor/	National/ Internatio

			No.	Citation Index	nal
1	Realization of Multiplexer Logic-Based 2-D Block FIR Filter Using Distributed Arithmetic.	Computer Assisted Methods in Engineering and Science	2299-3649	1.2	International
2	An efficient FIR filter architecture implementation using distributed arithmetic (DA) for DSP applications	International Journal of Innovative Technology and Exploring Engineering	2278-3075	0.6	International
3	Systolic architecture for adaptive block FIR filter for throughput using distributed arithmetic.	International Journal of Speech Technology (IJST)	1381-2416	4.2	International
4	Improved Selection of Separate V2v Communication Assets for LTE	International Journal of Engineering and Advanced Technology (IJEAT)	2249 – 8958	1.1	International
5	VLSI implementation of distributed arithmetic based block adaptive finite impulse response filter	materials today proceedings	2214-7853	3.2	International
6	Maximal length test pattern generation for the cryptography application	materials today proceedings	2214-7853	3.2	International

#### 5.8. Papers presented at National / International Journals :

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Diabetic Foot Ulcer Identification using Machine Learning.	International Conference on Sustainable Computing and Data Communication Systems (ICSCDS)	International	23-25 March 2023
2	TCAD Analysis of Substrate Thickness of a 10nm Vertical Double Gate SOI n-Type MOSFET	International Conference on Smart Systems and Inventive Technology (ICSSIT)	International	23-25 January 2023
3	MDCLCG with Square Root Carry Select Adder Technique for Hardware Security	International Conference on Augmented Intelligence and Sustainable Systems	International	24-26 November 2022

		(ICAISS)		
4	TCAD Simulation of a 10nm n-Channel Vertical Double Gate Silicon on Insulator MOSFET for Digital Applications	International Conference on Computing Communication and Networking Technologies (ICCCNT)	International	03-05 October 2022
5	Image Dehazing using Dark Channel Prior	International Conference on Intelligent Computing, Instrumentation and Control Technologies: Computational Intelligence for Smart Systems (ICICICT)	International	11 AND 12 AUGUST 2022
6	VI-characteristics and transient analysis of an EEPROM device	International Conference on Trends in Electronics and Informatics (ICOEI)	International	April 11-13 2023

#### 5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

#### 5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

#### 6. Awards / Honors received:

7. **Motto:** Time is money; use it to succeed. Live and Let live happily.